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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SULLIVAN, DANIELLE D

ART UNIT

PAPER NUMBER

1616

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/523,106	Applicant(s) DAIRIKI ET AL.	
	Examiner DANIELLE SULLIVAN	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/31/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-3 and 5 are pending examination. Claim 4 was cancelled in the amendment filed 7/31/2009.

Withdrawn rejections

Applicant's amendments and arguments filed 7/31/2009 are acknowledged and have been fully considered. Any rejection and/or objection not specifically addressed below are herein withdrawn.

Applicant's amendment has necessitated the new rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bramati et al. (US 5,981,433) in view of Suzuki (US 2003/0036481) Nakayama et al. (US 6,774,087).

Applicant's Invention

Applicant claims a granulated composition comprising a pesticidal ingredient selected from cyflufenamid, triflumizole, etc., potassium chloride, a lignosulfonate with a degree of sulfonation of at least 2 and a sulfate or phosphate salt of polyoxyalkylene

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arylphenyl ether, wherein the sulfate or phosphate salt is selected from polyoxyethylene tristyrylphenyl ether sulfate salt and polyoxyethylene tristyrylphenyl ether phosphate salt.

Claim 2 limits the amount of lignosulfonate surfactant to 1-15% and the salt of the polyoxyalkylene arylphenyl ether to 0.01-15%. Claim 5 specifies the active comprises trifumizole.

Determination of the scope and the content of the prior art

(MPEP 2141.01)

Bramati et al. disclose an exemplary dispersing agent for plant protection agrochemicals such as pesticidal dispersible granules, comprising (a) a lignosulfonate admixed with (b) sulfated triphenyl phenols (abstract). Preferably, a combination of REAX 88B or Polyfon O (3.8 sulfonation) and a tristyrylethoxylated sulfated ammonium salt (Soprophor 4D384) is anticipated (column 3, lines 10-17).

Bramati et al. disclose the dispersing agent wherein the preferred weight ratio of lignosulfonate (a)/polyoxyalkylene arylphenyl ether (b) is on the order 95/5 to 50/50 (column 2, lines 36-42). The pesticidal formulations comprise 0.01-90% of the plant-protection active agent and 0.1- 20% of the dispersing agent (column 3, lines 30-43). Assuming a composition comprises 10% of the dispersing agent and the ratio of (a) to (b) is 95/5, the formulation comprises 9.5% lignosulfonate and 0.5% polyoxyalkylene arylphenyl ether which anticipates the ranges of (a) 1-15% and (b) 0.01 to 15%.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Bramati et al. do not teach the presence of potassium chloride. It is for this reason that Suzuki is joined.

Suzuki teaches granular water-dispersible agents wherein the dispersing agents are selected from tristyrylphenyl ether or distyrylphenyl ether added with polyoxyethylene, tristyrylphenyl ether phosphate or distyrylphenyl ether sulfate added with polyoxyethylene and sodium ligninsulfonate, wherein two or more of the compounds may be used in a combination as the dispersing agent [0032]. Carriers consist of minerals selected from an inorganic salt such as potassium chloride [0034]. Examples comprising 100g triflumizole, 140g sodium ligninsulfonate and 237.5 potassium chloride are disclosed [0044].

Bramati et al. teach the particular species selected from polyoxyethylene tristyrylphenyl ether sulfate salt, however, polyoxyethylene tristyrylphenyl ether phosphate salts are not taught. It is for this reason that Nakayama et al. is joined.

Nakayama et al. teaches herbicidal composition comprising sulfate-type and phosphate type surfactants and their salts. The liquid herbicide comprises at least one anionic surfactant selected from sulfate-type surfactants and phosphate-type surfactants (column 2, lines 51-53). The surfactants include polyoxyethylene (mono, di or tri)styrylphenyl ether sulfates, polyoxyethylene (mono, di or tri)styrylphenyl ethers phosphates and their salts (column 1, lines 51-65; column 2, lines 24-37 and 56-65). Hence there is a teaching of equivalence between the sulfate salt and the phosphate salt in these polyoxyethylene (mono, di or tri)styrylphenyl ethers anionic surfactants .

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bramati et al. Suzuki and Nakayama et al. to utilize tristerylphenyl ethers phosphates and their salts. One would have been motivated to utilize these phosphate surfactants because Nakayama et al. teach that they are anionic surfactants and one of ordinary skill would have been able to substitute polyoxyethylene styrylphenylether sulfates with polyoxyethylene styrylphenylether phosphates and their salts.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bramati et al. Suzuki and Nakayama et al. to utilize tristerylphenyl ethers phosphates and their salts. One would have been motivated to utilize these phosphate surfactants because Nakayama et al. teach that they are anionic surfactants and one of ordinary skill would have been able to substitute polyoxyethylene styrylphenylether sulfates with polyoxyethylene styrylphenylether phosphates and their salts.

Claims 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bramati et al. in view of Suzuki and Nakayama et al. and in further view of Suzuki et al. (US 5,980,926).

Applicant's Invention

Applicant claims a granulated composition comprising a pesticidal ingredient, a lignosulfonate with a degree of sulfonation of at least 2 and a sulfate or phosphate salt

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of polyoxyalkylene arylphenyl ether, wherein the sulfate or phosphate salt is selected from polyoxyethylene tristyrylphenyl ether sulfate salt and polyoxyethylene tristyrylphenyl ether phosphate salt. Claim 3 specifies the active is cyflufenamid.

Determination of the scope and the content of the prior art

(MPEP 2141.01)

The teachings of Bramati et al. and Nakayama et al. are disclosed in above 103 rejection.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Bramati et al. and Nakayama et al. do not teach the particular pesticides cyflufenamid and triflumizole. It is for this reason that Suzuki et al. is joined.

Suzuki et al. teaches water dispersible granules suitable for preparing the formulations of pesticides with excellent dispersibility (abstract, column 2, lines 10-16). The pesticidal components preferably include triflumizole (column 2, lines 45-47. Example 1), cyflufenamid (structure of formula [1], column 3, Table 1, No. 1, Example 4) or a combination of the two (column 2, line 39-column 4, line 25). Additionally, the granule is combined at the wet milling process with tristyryl phenyl ether added thereon with polyoxyethylene (column 4, lines 26-34). Also, a dispersion aid, sodium ligonsulfonate was added at the time of wet milling (column 4, lines 35-41).

Finding of prima facie obviousness

Rationale and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bramati et al., Nakayama et al. and Suzuki et al. to utilize triflumizole and cyflufenamid. One would have been motivated to utilize triflumizole and cyflufenamid because Suzuki et al. teach that they preferably formulated into water dispersible granules and provide excellent dispersibility. One of ordinary skill would have been motivated to formulate the cyflufenamid with the dispersing agent disclosed by Bramati et al. because they are plant-protecting active ingredients which can be substituted in the formulation. Since these actives are known to be formulated as water dispersible granules, one would have been motivated to combined the actives with the dispersing aid in order obtain a highly dispersible granular pesticide.

Response to Amendment/ Declaration

The declaration under 37 CFR 1.132 filed 7/31/2009 is insufficient to overcome the rejection of claims 1-3 and 5 based upon Bramati et al. as set forth in the last Office action because: The showing of unexpected results is not commensurate in scope with the claims. The burden is on the applicant to establish that the results are in fact unexpected, unobvious, and of statistical and practical significance. Presently, only Sample 1 demonstrates an unexpected result of rapid dispersibility for a composition comprising a 3.7% cyflufenamid, 16.6% triflumizole, 5.25% lignosulfonate (degree of sulfonation 4.7), 10% potassium chloride and 3.5% polyethylene tristyrylphenyl ether sulfate ammonium salt.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danielle Sullivan whose telephone number is (571) 270-3285. The examiner can normally be reached on 7:30 AM - 5:00 PM Mon-Thur EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Danielle Sullivan
Patent Examiner
Art Unit 1616

/Mina Haghighatian/
Primary Examiner, Art Unit 1616